



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/347,374	07/06/1999	HIEP PHAM	WIDCC006/00U	3773
7590 01/09/2004				
PATENT GROUP COOLEY GODWARD LLP FIVE PALO ALTO SQUARE 3000 EL CAMINO REAL PALO ALTO, CA 943062155			EXAMINER VINCENT, DAVID ROBERT	
			ART UNIT 2661	PAPER NUMBER

DATE MAILED: 01/09/2004

15

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/347,374

Applicant(s)

PHAM ET AL.

Examiner

David R Vincent

Art Unit

2661

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Art Unit: 2661

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cheung (US 5,812,531 of record) in view of Haartsen (1998 Bluetooth article) or (WO 99/14897).

As shown in Figs. 1-9, Cheung discloses a data communication system (col. 5, lines 39-56), a first network (e.g., 10, Fig. 1; 60, Fig. 2, networks comprising AP1, Figs. 3-4; each AP can be a dedicated internetworking device, col. 5, lines 39-56), a second network (e.g., Figs. 1-2 or networks comprising AP2, Figs. 3-4), means for forwarding from a first network to a second network (either wirelessly, e.g., col. 6, lines 48-59; col. 10, lines 40-51; or using a node which in located in two different networks, e.g., E, B, C, Fig. 1; B, Figs. 3-4; a node that is in range of at least two APs may forward data from one network to another, Fig. 5 where node B is listed as a first tier node for both AP1 and AP2), as specified

Art Unit: 2661

in claims 1-2, 6, 7; means for receiving a first set of network information relating to said first network (broadcasting topology data including APs network/IP address, col. 4, lines 52-67; AP broadcasts, e.g., col. 6, line 59-col. 7, line 17; every node will emit a broadcast topology message, col. 6, lines 66-67, therefore B, Fig. 3-4 can forward data from network one to network two and this data can include IP addresses, col. 7, lines 1-9; col. 8, lines 14-19), as specified in claims 3, 5, 7; first node (reads on B or AP1, Figs., 3-4), as specified in claim 4; an internetworking node (each AP can be a dedicated internetworking device, col. 5, lines 39-56: clearly a node that is in range of at least two APs can forward data from one network to another, Fig. 5 where node B is listed as a first tier node for both AP1 and AP2), as specified in claim 8; determining wireless internetwork path based on connectivity advertisement and additional connectivity advertisement broadcast (reads on using both the topology and beacon broadcasts and selecting paths based on which AP is better suited for the node at that time, e.g., col. 6, line 59-col. 7, line 67, and the fact that nodes receive topology from a plurality of devices not just the APs), as specified in claim 7, 9-13, 15-16, terminating first connection (determining that the signal strength from AP1 is not as good as what a node is

Art Unit: 2661

receiving from AP2 or by reading the table, Fig. 5 and determining that the node which B was communicating is now a second tier element, col. 7, lines 18-43; col. 9, lines 26-29), as specified in claim 14. However, Cheung fails to particularly call for the newly added limitation of relaying data between the two cells/AP coverage areas, as specified in claims 1, 6-7, 11, and 14.

Haartsen teaches relaying data between the two cells/AP coverage areas, as specified in claims 1, 6-7, 11, and 14 by using the Bluetooth protocol and what are commonly known as ad-hoc connections, and piconets (see 1998 Bluetooth article, piconets, pg. 114-116, and Fig. 9; in Haartsen, WO 99/14897: see e.g., how any unit can be temporarily assigned as a relay/bridge/master, pg. 19, 24-25; roaming units, pg. 23; simplifying connectivity of a WLAN, pg. 25; first-third connectivity rings, pg. 26).

Combining the Bluetooth protocol (Haartsen) with a WLAN (Cheung) simplifies connectivity, allows for mobiles to span a greater range and better combats noise by adding the frequency hopping of Bluetooth.


3. Applicant's arguments with respect to claims 1-16 have been considered but are moot in view of the new ground(s) of rejection.

Art Unit: 2661

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David R Vincent whose telephone number is 703 305 4957. The examiner can normally be reached on M-TH.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas Olms can be reached on 703 305 4703. The fax phone number for the organization where this application or proceeding is assigned is 703 872 9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 306 0377.


David R Vincent
Primary Examiner
Art Unit 2661

January 5, 2004